LANDMARK DESIGNATION REPORT

IBM Building

330 N. Wabash Ave.

Preliminary and Final Landmark recommendation approved by the Commission on Chicago Landmarks, November 1, 2007

CITY OF CHICAGO
Richard M. Daley, Mayor

Department of Planning and Development
Arnold L. Randall, Commissioner

Cover: Photo from *The Sky's the Limit*.

The Commission on Chicago Landmarks, whose nine members are appointed by the Mayor and City Council, was established in 1968 by city ordinance. The Commission is responsible for recommending to the City Council which individual buildings, sites, objects, or districts should be designated as Chicago Landmarks, which protects them by law.

The landmark designation process begins with a staff study and a preliminary summary of information related to the potential designation criteria. The next step is a preliminary vote by the landmarks commission as to whether the proposed landmark is worthy of consideration. This vote not only initiates the formal designation process, but it places the review of city permits for the property under the jurisdiction of the Commission until a final landmark recommendation is acted on by the City Council.

This Landmark Designation Report is subject to possible revision and amendment during the designation process. Only language contained within the designation ordinance adopted by the City Council should be regarded as final.

IBM Building

330 N. Wabash Avenue

Built: **1969-1972**
Architect: **Ludwig Mies van der Rohe, C. F. Murphy Associates (engineers)**

The IBM Building, completed in 1972, was the last American office building designed by internationally renowned architect Ludwig Mies van der Rohe. Standing along the north bank of the Chicago River between State Street and Wabash Avenue, the 52-story tower is an archetypal example of the "Miesian" skyscraper, with its prismatic massing, brawny steel structure, sleek curtain wall, glass-encased lobby, and gracious plaza that flows seamlessly from within. At the time that it was constructed, the building also boasted a number of technological innovations designed to make it more accommodating to the IBM Corporation and its specific requirements.

Mies van der Rohe is widely considered one of the most influential architects of the twentieth century. Originally from Germany, Mies immigrated to Chicago in 1938, where he spent the most creative and productive period of his life. Mies's architectural career was defined by a relentless quest to clarify and reveal the underlying structure of a building, stripping away reveal its essential form. The result of this quest can be seen in nearly all of his buildings, and most emphatically in the designs for tall apartment and office buildings like the IBM Building. These structures transformed the urban landscape and spawned countless imitations in cities across the country.

The IBM Building was constructed to house the Chicago offices of the International Business Machines Company (IBM). In 1966, when the company first approached the Office of Mies van der Rohe to design its new downtown office building, IBM was entering a time of tremendous innovation and transition. Moving from tabulating machines to computers, the corporation soon became a pioneer in the use of computers for business applications. Still operating today, IBM is one of the few computer companies that have a continuous history dating before 1900.

The IBM Building has a commanding presence between State Street and Wabash Avenue on the north side of the Chicago River. Its recessed columns provide a protected arcade around a glass-enclosed lobby. A simple canopy shields the main entrance on Wabash.

ARCHITECTURE OF THE IBM BUILDING

The IBM Building at 330 N. Wabash Avenue is a rectangular monolith with its sheer, bronze-tinted glass walls interrupted only by the aluminum spandrels and mullions that outline its structure. It exemplifies the Miesian skyscraper at its pinnacle, accepted as the corporate expression for tall office buildings that were springing up in cities throughout America and around the world. At the time of its completion in 1972, the IBM Building was the third tallest building in the city of Chicago, and was the second tallest designed by Mies. Imitations surrounded it on all sides, designed by architects who had studied directly under Mies as well as those who were unofficial students. Some designs were more literal in their translations than others, but the influence of the Miesian skyscraper could be seen in countless buildings on the Chicago skyline.

Mies was first approached about the commission for the IBM Building in 1966, the year of his 80th birthday. According to an article in the July 1972 edition of *Inland Architect*, Mies arrived to inspect the site in a wheelchair, impaired by the arthritis that had plagued him for nearly a decade. Looking at the irregular 1.6-acre plot hugging the north side of the Chicago River between Wabash and State streets, Mies asked, somewhat perplexed, "Where's the site?" Indeed, the site left much to be desired. According to Bruno Conterato, who was put in charge of the project by Mies, "The site appeared to us as almost nonexistent," especially with the awkward curving of Wabash Avenue into the east side of the lot. Other problems Mies and his colleagues had to contend with were the existence of railroad tracks running underneath the site, as well as an existing agreement with the neighboring Sun-Times building to provide storage for the newspaper company on the lot.

Despite these complications, Mies and his firm managed to develop a plan for a massive 52-story tower, while still leaving half of the site for a surrounding plaza. The placement of the building along the north end allowed for a generous open space facing the river. This siting was also meant to engage Bertrand Goldberg's Marina City towers to the west and the Sun Times Building (now demolished) to the east. This sensitivity to the surrounding buildings challenged the often-heard criticism that modernist architects like Mies paid little attention to the context into which their buildings were placed. As Conterato continued in *Inland Architect*,

> By going well back on the site . . . we in effect set up a line of three towers, since the Marina towers are canted on their site, with the east structure farther north than the west one. This kept us from blocking any more of the view towards the lake than the east tower already does.

The building is consummately Miesian in its design. Its characteristic features reflect the underlying principles of architecture held by Mies and other architects designing in the International Style of the Modern Movement. The massing is straightforward and almost severely geometric—a simple rectilinear box rising to a height of 670 feet above a plaza elevated above State Street on the west and Kinzie Street on the north. The square structural columns, which are recessed but still visible through the curtain wall, are exposed at the base of the building, leaving a protected arcade around the recessed, glass-encased lobby. Baring the columns, a common feature in Mies's high-rise design, was another way to prominently display the building's underlying steel framework. The bronze-tinted, double-glazed windows of the curtain wall are

taller than wide, with an aluminum spandrel below each. The vertical windows, along with the always-present I-beams welded to the vertical mullions of the curtain wall, accentuate the height of the building. The I-beams also lend a certain dynamic quality to the curtain wall, transforming it from a transparent facade of glass when viewed head-on to an opaque wall when seen at certain angles.

The respectful, knowledgeable use of materials was a hallmark of Mies's work, and is clearly evident in his design for the IBM Building. Steel and glass were the dominant materials used in the Miesian skyscraper. To Mies and many other International Style architects, steel and glass best represented modern technology and all its possibilities. Steel was always used as the main structural material for his tall buildings, and sometimes as the material for the curtain wall framing. For IBM, Mies chose to frame the exterior curtain wall and exposed base columns in bronze-anodized aluminum. The glass of the curtain wall was also tinted bronze to create a more unified appearance on the exterior facades.

The typical Miesian high-rise lobby was a spare yet elegant space, always appointed with expensive and impeccably applied marble, granite, and mosaic tiles. The lobby of the IBM Building is no exception. At nearly 26 feet high, the height of IBM's lobby is impressive. Unusually tall for an office building, it was considered necessary to keep the proportions of the total building correct. As Bruno Conterato explained to *Inland Architect*,

> we felt that the lobby's interior dimensions had to be related in scale to the building's total dimensions. We could have attempted to alter the lobby's height, to achieve a perhaps more human scale, but that would have ruined the overall scale of the building. It would have looked like a sawed-off building if we had designed a lobby less high.

This rather monumental space is interrupted only by the elevator and escalator bays that are lined up in short rows in the middle. Large slabs of Travertine marble cover the walls of the bays, each piece matched precisely with its neighbors to give the illusion that the bay is comprised of a single block of marble. So important was this detail that Conterato traveled to marble quarries in Rome to ensure that the marble was cut so that the horizontal grain would perfectly match. Polished pink granite floor tiles and delicate, shell pink mosaic ceiling tiles compliment the pale, pocked marble with its pearl gray and honey veins.

The extensive use of glass along the exterior of the IBM Building has the effect of dematerializing the structure, a concept that Mies had favored since his early days as an architect in Germany. Nowhere was this blurring of line between outside and inside more successfully achieved in the building than on the ground floor. As in nearly all of Mies's high-rise buildings, the curtain wall of the IBM Building stops abruptly just above the lobby level, leaving only the structural columns exposed. The lobby area is recessed from the perimeter walls, and encased in glass, creating a covered arcade connecting the lobby to the surrounding plaza. Plaza and lobby floor are covered with the same material, laid identically to give the impression of the plaza as a continuation of the lobby. According to Conterato,

> The idea was to open up not only the building itself, but the plaza, too. . . . We wanted to limit the amount of visual obstruction and cut down the blocked views. All of this tends to lighten the entire area, as well as the building." A flat, aluminum canopy centered along the east side of the lobby, providing shelter for the building's main entrance on Wabash Avenue, is the only interruption.

The IBM Building was commissioned by the IBM Corporation in 1966, and construction began in 1969. The site for the building posed several problems, including the awkward curve of Wabash Avenue along the east side, the existence of railroad tracks running underneath the site, and an existing agreement with the Sun-Times building for storage on the lot. Despite these challenges, Mies and his colleagues managed to include a spacious granite plaza around the 52-story tower.

Although the overall design of the IBM Building faithfully followed the Miesian model, its numerous technological innovations were what placed it apart from the other office buildings of its time. Due to the nature of the company's work with computers, the IBM Corporation came to Mies with several specific needs for its office building, the most important of which concerned the regularity of temperature and humidity in the building. C. F. Murphy, associate architects and engineers for the project, developed several sophisticated means to help regulate the building's interior environment. The corporation helped to develop a state-of-the-art electric heating and cooling system that would be operated by a computer designed by IBM. A weather station placed on the roof of the building sent constant updates to the computer, which adjusted heating or air conditioning accordingly. The computer could also respond variably to environmental conditions within each quadrant of the building: for example, offices facing west could be given cool air at the same time that north or east facing offices were given warm air. In order to take advantage of the excess heat in the building created by inhabitants, lights, and computers, a heat reclamation system was installed to collect and re-route the excess heat for other purposes.

While C. F. Murphy dealt with the mechanics of heating and cooling the building, the Office of Mies van der Rohe was responsible for mitigating problems with the interior climate through the design of the curtain wall. Mies had long been familiar with the shortcomings of the curtain wall in its ability to insulate. The single-glazing and exposure of the structural frame to the elements in Mies's first high-rise apartments at 860-880 Lake Shore Drive resulted in spaces that were difficult to heat and cool, and the central air-conditioning Mies had recommended was not installed due to budget restrictions. Although subsequent buildings featured curtain walls set in front of the structure that allowed for space in which to place heating and air-conditioning systems, there were still a number of problems inherent in the curtain wall, including insulation difficulties and the possibility of water seeping through the walls during storms. The curtain wall designed by Mies's office for the IBM Building addressed these problems using several innovations to the system in conjunction, including double-glazed windows; a plastic thermal barrier between the exterior and interior layers of the curtain wall to curb heat transfer and condensation; and a pressure-equalization system to prevent differing pressures on the interior and exterior of the building from forcing water inside. This combination of features, all of which occurred within the handful of inches comprising the thickness of the curtain wall, was unprecedented.

In addition to advanced environmental control, the IBM Building featured several other modern amenities all designed for the convenience and safety of the tenants. The 32 high-speed elevators, two freight elevators and four special-purpose elevators were installed to keep waiting times to an absolute minimum. The elevators were also the first in the city to feature "fireman's recall," which allowed all the elevators to be called immediately to the lobby at the first indication of a fire anywhere within the building. This feature subsequently became standard, and was instituted as a code requirement in many cities. The building was also equipped with a security system that *Inland Architect* deemed "practically Orwellian," which monitored all elevators and all doors on each floor. The synthesis of elegant design and cutting edge technology (along with the stunning views down the Chicago river out to Lake Michigan) was a powerful draw for potential tenants, keeping the building fully occupied in the years immediately following its construction, even as other office towers struggled to find tenants in the slackening market.

The interior lobby space flows seamlessly through the building's glass skin onto the exterior plaza. Plaza and lobby floor are covered with the same material to enhance this effect. The veins in the travertine slabs are perfectly matched to give the illusion that the walls are one continuous block of marble.

IBM: The International Business Machines Corporation

The IBM Corporation, one of the great, quintessential American corporations, was born out of the need for more accurate and swifter tabulation of U. S. census data. Exploding population due to increased immigration in the late nineteenth century led the Census Bureau to sponsor a contest to find a more efficient way to organize the data. Herman Hollerith, a statistician with the Census Bureau, won the contest by developing a machine that utilized an electric current to sense holes in punch cards. In the years after the invention of the tabulating machine, a number of companies emerged—one founded by Hollerith himself in 1896. Three of these coalesced to become the Computer-Tabulating-Recording Company (C-T-R), IBM's predecessor, in 1911. At the time of its incorporation, C-T-R employed 1,300 people and owned plants and offices in a number of cities in the United States and Canada, including Washington D. C., Dayton, Detroit, and Ontario. In the years after World War I, C-T-R continued to expand, developing new technologies and acquiring property and patents from competing companies. By the time the company changed its name to the International Business Machines Corporation in 1924, it had expanded to include several plants in Europe.

IBM's first foray into computing occurred in the mid-1940s, with the invention of the Automatic Sequence Controlled Calculator. Known as the Mark I, this machine was developed at Harvard University, and was the first to automatically calculate long computations. Four years later, IBM produced its own digital calculator, called the Selective Sequence Electronic Calculator, quickly followed by two other calculators. Technological changes in the 1950s allowed for faster computing and smaller machines. Vacuum tubes, and, later transistors, created machines that completely outstripped their earlier counterparts. Harvard's Mark 1 could complete a single arithmetic computation in just under one second; the IBM 7090, produced in the late 1950s, could perform 229,000 calculations per second. Through the 1950s and 1960s, IBM continued to expand and improve the technology surrounding the computer, and developed innovative means of bringing them to broader markets.

By the late 1960s, the IBM Corporation was a business behemoth, operating offices and plants across the United States, Europe, and parts of Asia. In the Chicago area alone, 4,500 employees worked in fifteen locations. This was a far cry from the 12 salesmen assigned in 1916 to the company's first Chicago office. In 1968, the company announced that it would consolidate all of its Chicago offices into one downtown office building. An article in the *Chicago Tribune* on June 19, 1968 detailed plans for the new building:

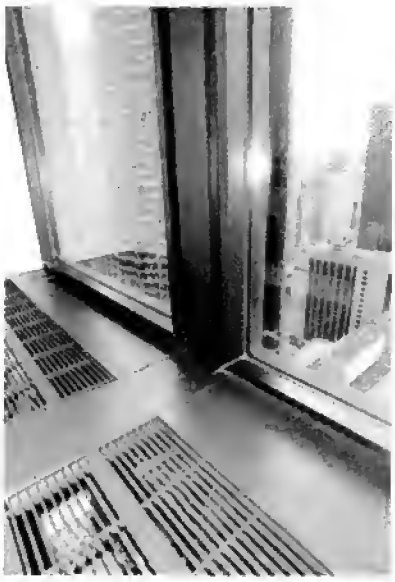
> H. W. Miller Jr., an I.B.M. vice president, explained that it will be the largest office building I. B. M. has ever built and that it will rise 695 feet from street level, becoming the city's third highest building after the John Hancock and First National Bank buildings. Miller said nearly all I. B. M.'s Chicago facilities will be consolidated into 50 per cent of the building. The rest of the building will be available for rental. Of the 51 stories above the lobby, 46 will be used for office space, two will contain major computer facilities, and the rest will house mechanical equipment.

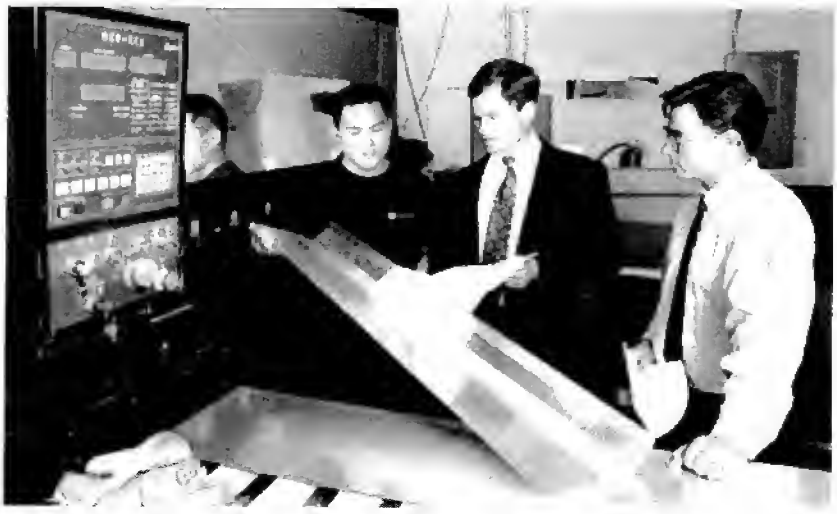
IBM's choice of Mies van der Rohe to design the office building was an astute one, not only because he was one of the most influential and respected architects in the world, but also because

the rationality and modernity of Mies's designs meshed well with IBM's own reputation as an innovator. His career spanned generations and continents, with a body of work that incorporated a central philosophy of structure, honed through time and experience. The IBM Corporation was a leader in the rising technology industry that would transform business operations in the latter decades of the 20th century. The marriage of the two proved to be the culmination of that body of Mies'work.

Computer-Controlled HVAC System Helps Cut Energy Usage in Glass-Walled Office Building

Just when conservationists are turning an increasingly critical eye toward glass-walled structures, a new Chicago office building in the classic mirrored style of Mies van der Rohe comes out best in an energy-use study.





The IBM Corporation was the leading innovator in tabulating and computer technology throughout the 20th century so their selection of one of the most prominent modernist architects in the world for their corporate headquarters was an excellent one. Mies's design employed a computer controlled HVAC system that could individually adjust temperatures in different areas of the building, a necessity for IBM's specialized equipment.

THE EVOLUTION OF THE "MIESIAN" SKYSCRAPER

Most of the buildings Mies designed during his American career can be viewed as variations on two overriding themes. The first was that of the clear span structure, best illustrated in his designs for Crown Hall at IIT and for the National Gallery in Berlin. The second was the rectilinear, glass-clad tower, used mainly for apartment, office, and government buildings. Although his critics decried this obvious pattern in his work as redundant and limited, Mies and his followers viewed it as a deliberate, continual movement toward a universal ideal of structure. As Mies' biographer, Franz Schulze explains, Mies believed that

> ...solutions are better developed than invented and that the best idea is one basic enough to permit not only its application to a variety of functions but its refinement in the course of logical development . . . Mies obviously made room for invention, but within a system; indeed refinement and invention were part of a continuum, with one not always or necessarily distinguishable from the other.

Considering the Miesian tall building in this manner, one can view the IBM Building as the direct result of preceding designs such as the 860-880 Lake Shore Drive Apartments and the Seagram Building, as well as appreciate the special considerations and innovations of the building within the Miesian framework that make it distinctive.

Although all of Mies's tall apartment and office buildings, including the IBM Building, were constructed in the years following World War II, he first formulated ideas about such buildings as a young architect in Weimar Germany. Between 1921 and 1922, Mies experimented with the aesthetic possibilities of glass used exclusively as an exterior material on tall buildings by creating sketches for two glass skyscrapers. The first sketch was developed as Mies's submission for a 1921 competition to design an office building on a triangular shaped lot in Berlin. Nicknamed "the Honeycomb" by the judges of the competition, the design consisted of a series of prismatic towers with shear glass facades. The plan of each tower resembled a crystal, with sharply angled triangular bays clustered around a central core. This complicated plan did not readily reveal itself in the elevations of the towers, which appeared together as a single, monumental glass cliff.

The second design, known as the Glass Skyscraper, is of unknown origin—no client or function is linked to this drawing. The 30-story building is, like the Honeycomb, sheathed in a transparent wall of glass; however, the shape of this building is much less angular, its amoebic plan restrained only by the regularity of the columns and floor slabs visible through the glass envelope. Although never built—many of their features would have been impossible to construct using the technologies available at the time—these two designs were remarkably prescient in their exposure of the underlying structure through the use of glass skins. Indeed, Mies's basic concept of what a skyscraper should be was formed fleshing out these sketches. Writing about the Honeycomb in the magazine *Frülicht* in 1921, Mies explained:

> Only in the course of their construction do skyscrapers show their bold, structural character, and then the impression made by their skeletal frames is overwhelming. On the other hand, when the facades are later covered with masonry this impression is destroyed and the constructive character denied, along with the very principle fundamental to the artistic conceptualization. (Schulze, 100)

These words could just have easily been spoken by Mies over 30 years later regarding his groundbreaking apartment buildings at 860 and 880 Lake Shore Drive.

A variety of circumstances, including two World Wars and a trans-Atlantic relocation, delayed Mies from further consideration of the tall building until the late 1940s. Among Mies's early post-war commissions was an apartment complex along Lake Shore Drive for Chicago developer Herbert Greenwald. Mies and Greenwald met in 1946, and soon after formed a business partnership that would last until Greenwald's untimely death in 1959. 860-880 Lake Shore Drive was the second apartment complex Mies designed for Greenwald, and the first example that was actually built of what would become Mies's prototypical tall building. The two identical 26-story towers featured steel skeletal structures clearly expressed on the glass-filled facades of the building. The towers were set at right angles to each other, with a flat, steel-framed canopy connecting them.

It was in this project that Mies first implemented some of the hallmark features that would be used on nearly all of his subsequent skyscrapers, including the rectangular, monolithic massing, the forthright articulation of the structure on the facades, the recessed, glass enclosed lobby surrounded by exposed structural columns at the base of the building, and, most famously, the I-beams welded to the vertical exterior mullions and columns. While some criticized the use of the I-beams as purely decorative and a violation of the modernist rule of eliminating all ornamentation, they added a sense of rhythm and variation to the surface of the buildings. The "Glass Houses," as the two buildings came to be called, represented a tremendous shift from the ziggurat-style skyscrapers of the pre-war era, and were considered "the purest expression of the vitreous high-rise yet achieved" as noted by Schulze.

Riding on the success of 860-880 and subsequent projects, Mies then turned his sights on more prestigious commercial commissions. In 1954, Joseph E. Seagram and Sons approached Mies to design a new office tower for the company's headquarters in New York City. The Seagram Building represented a new use for Mies's tall building prototype, from the apartment complexes he built with Herbert Greenwald in the 1940s and early 1950s to the corporate office tower in mid-1950s through the 1960s. For the design of the building, Mies returned to the basic format of the "tall building conceived as glass box" that he had first implemented in 860-880 Lake Shore Drive.

While obviously derived from the design for 860-880, the Seagram Building featured several subtle but important differences, the most significant being the use of a glass skin or curtain wall in front of the structural columns. Rather than integrating the glass windows into the structural framing of the building, as in 860-880, Mies placed the columns behind a completely non-load bearing aluminum and glass curtain wall. Mies had first employed the curtain wall in this manner with the Commonwealth Promenade (West Diversey Parkway) and Esplanade (900-910 Lake Shore Drive) apartment complexes in Chicago a few years earlier. The curtain wall helped to insulate the building, and allowed for the installation of air conditioning systems between the columns and curtain wall. In addition to the practical considerations, this "skin and bones" relationship between the structure and curtain wall was in many ways the realization of Mies's first glass skyscraper designs from the early 1920s, in which the structural elements did not interrupt the continuous glass skin but were instead visible through it.

(Above left): One of the earliest Miesian skyscrapers was the 860-880 Lake Shore Drive apartment complex (a designated Chicago Landmark) designed for Chicago developer Herbert Greenwald in 1948-1952. These two identical 26-story towers became Mies's protypical tall building. (Above right): The 1954 Seagram's Building in New York City represented a new use for Mies's tall building prototype, the corporate office tower. (Right): The last building designed by Mies, the 1972 IBM Building is the culmination of his skyscraper development.

The Seagram Building was the first illustration of how well the Miesian design for the tall building portrayed the image of corporate dominance in urban areas in the decades following World War II. With money from the post-war economic boom pouring into their coffers, companies like Seagram wanted office buildings that were significant—structures that would reflect their importance and power. Mies's designs for office buildings—monolithic slabs of dark metal and tinted glass—were at once muscular and refined, their austerity tempered by subtle detailing and rich materials. The curtain walls, with columns of tall windows separated by metal spandrels and vertical I-beam mullions, emphasized the height of the buildings. The siting of a spacious plaza at the front of the building, a feature used in almost all Mies's later office designs, created a welcome public space and allowed people within it to view the building at a more advantageous angle. The plaza, which was a sacrifice of rentable space, could also be taken as a sign of the company's largesse.

By the 1960s, the Miesian skyscraper had become synonymous with urban office buildings around the country, and Mies had reached an unprecedented level of professional success and artistic renown. The popularity of Mies's designs lent credence to his continued belief that a universal architecture was possible, even as others criticized his work as reductivist and sterile. By that time, however, advancing age and increasing health problems began to affect his ability to work, forcing him to cede the management of most projects to trusted members of his staff, while still providing a supervisory role. Ironically, it was during this late period of his career that his office completed some of its more substantial commercial and public projects, including the Dominion Centre in Toronto, and 111 E. Wacker Drive, the Federal Center, and the IBM Building in Chicago. This was possible precisely because of the system of architecture that Mies had perfected through the previous years, allowing the firm to produce individual designs within already established models.

ARCHITECT: LUDWIG MIES VAN DER ROHE

Born Ludwig Mies in Aachen, Germany in 1886, Mies showed an early interest in the building trade, partly due to the fact that his father, Michael Mies, was a master marble sculptor. Mies spent many hours of his youth assisting his father in the family's stonecutting business, which specialized in carving tombstones. The influence of Mies's childhood can be seen in his architectural career, particularly in the care with which he chose materials and the manner in which those materials were expressed. In 1905, after several years in trade school and working as an apprentice and draftsman under local builders, Mies moved to Berlin. In a short time, he found a position under Bruno Paul, an emerging designer whose work within the German design section at the 1904 World's Fair in St. Louis had garnered international attention.

It was while working for Paul that Mies received his first commission. In 1906, philosopher Alois Riehl and his wife approached Paul's studio in the hopes of finding a gifted young architect to design a house for them in a nearby Berlin suburb. Although Frau Riehl was initially concerned about his lack of building experience, Mies was able to convince her to give him the job. The resulting stucco-clad building with a steeply pitched side gable roof and eyebrow dormers was well-executed yet conventional. Frau and Herr Riehl were delighted with the house, which received generous reviews from several of Mies's contemporaries.

This small triumph under his belt, Mies left Bruno Paul's studio for independent practice. Two years later, in late 1908, Mies went to work for Peter Behrens. Walter Gropius had joined the firm around the same time as Mies, and left in 1910 to open an independent practice. A French Swiss architect named Charles Jeanneret (later known as Le Corbusier) came to work for Behrens soon after Gropius' departure. Both men would later take their places with Mies among the greatest figures of the Modern Movement.

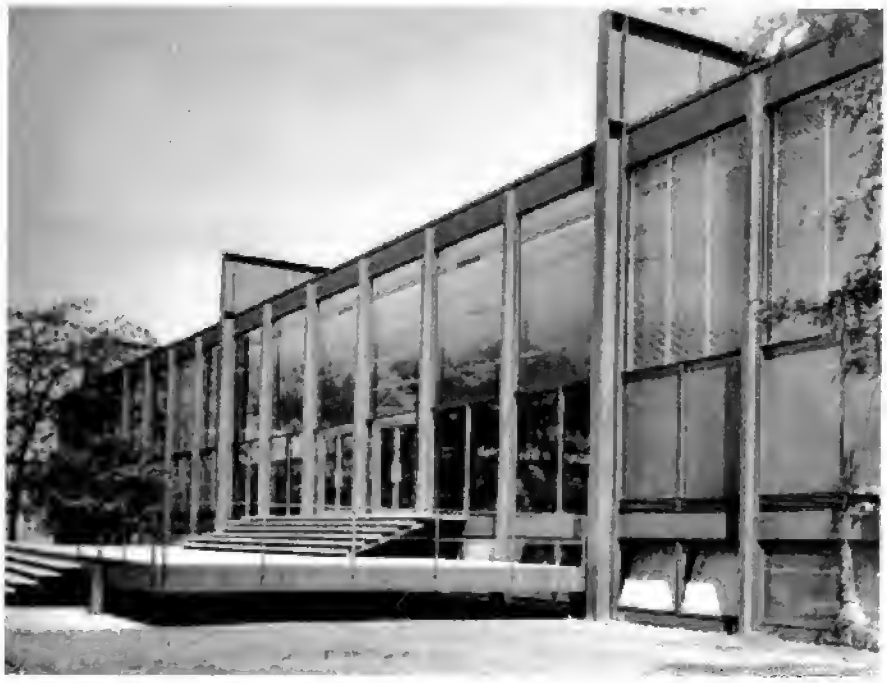
Behrens, who like Bruno Paul was both a designer and architect, was at the height of his career in 1908, having just been put in charge of all advertising and architectural design for Allgemeine Elecktricitätsgesellschaft (AEG) Company, one of Germany's most powerful corporate entities. Behren's industrial designs for AEG, most famously the Turbine Factory in Berlin (1909), did not try to camouflage the massing and structural materials, and clearly articulated structure and interior space. The more traditional, neoclassical designs that Behrens' office produced for large-scale public buildings and private residences were not as clearly forward-looking as the industrial buildings, but instead showed the influence of Karl Friederich Schinkel, one of the most important German architects of the nineteenth century. Schinkel's buildings, while obviously still rooted in the stylistic traditions of the past, expressed clarity of structure and form that Behrens admired and sought to emulate. Under Behren's tutelage, Mies also began to immerse himself in Schinkel's designs. And, while Mies would later disdain their classical veneer, several features of Schinkel's buildings were influential in the development of Mies's own designs, including the rhythmic quality of the facades (mainly through the use of rows of columns or windows), and the raised platforms on which Schinkel placed his buildings.

Not much time passed before Mies found himself becoming disenchanted with Behrens and, by extension, Schinkel. At the same time, he found new inspiration in the work of Dutch architect H. P. Berlage. Mies first encountered Berlage while working in Holland on an assignment with Behrens. An accomplished architect nearly thirty years Mies'senior, Berlage had gone beyond Schinkel and Behrens in seeking out a new kind of architecture that, in Mies'words, ". . .was honest down to the very bone. That is what interested me the most, together with the spiritual character that had nothing to do with classicism, or with historicism." (Spaeth, 65). To Berlage, structure, not ornament, was the essential element of architecture.

Inevitably, the increasing differences in design philosophy strained Mies'working relationship with Behrens. Mies left Behren's employ in 1912, and established his own architecture firm in Berlin in 1913. A year later, he was drafted into the German Army, and served until 1918 supervising the construction of roads and bridges. Mies returned to his practice in Berlin after the war. Although the pace of building slowed due to economic and political problems, the concurrent artistic uprising in postwar Germany provided a rich background for Mies to develop his inchoate architectural ideology. The primary importance of structure, instilled in Mies by Berlage, was only re-affirmed and strengthened in the manifestoes of postwar architectural movements in Germany and throughout Europe, which sought to remove all historical references from architecture. According to Mies' biographer Franz Schulze,

> such a process of abstraction, of paring away superficialities in order to reveal essences, struck Mies as the crucial method of arriving at vital form in the new arts, and the apparent purity of geometric form . . . appealed to him. For geometry seemed the most rational product of abstraction, which was itself a rational mode of creative expression.

Considered Mies's European masterpiece, the German Pavilion for the Barcelona International Exposition was an early example of the use of weight-bearing columns and non-load bearing walls. Mies relocated to Chicago to become director of the School of Architecture at Armour Institute of Technology in 1936. There he designed over twenty buildings for the campus of what was to become the Illinois Institute of Technology (IIT), including Crown Hall (a designated Chicago Landmark) in 1952-1956.



While paying the bills with traditional commissions from wealthy clients, Mies experimented with designs in glass, which was considered the most compelling and promising architectural material of the day. His designs for glass skyscrapers in the early 1920s, while never built, were among the most breathtakingly original of his entire career, and foreshadowed the glass and steel buildings that would revolutionize the urban landscape after World War II.

In 1926, Mies was offered a position at the Deutsche Werkbund, an organization of artists, architects, and industrialists whose mission was to improve the quality of German design. While at the Werkbund, Mies was approached by the German government to design the German Pavilion for the Barcelona International Exposition. Considered Mies's European masterpiece, the one-story, flat roofed building was simple but luxurious, with polished black onyx and travertine marble surfaces. It was also an early example of Mies's use of the free plan, with the weight of the roof carried by columns with non-load bearing screens acting as moveable walls.

Due in large part to his success with the Barcelona Pavilion, Mies was offered the position of director of the Bauhaus in 1930. Mies's contemporary Walter Gropius had transformed the school (originally known as the School of Arts and Crafts) after World War I as a place where architecture, art, and design could be studied and practiced together. Tensions between the school and the Nazi government forced Mies to move the Bauhaus from its home in Dessau to Berlin in 1932. This relocation only delayed the inevitable, and the Gestapo resumed its harassment of the school within ten months of the move to Berlin. Mies eventually decided to close the school in 1933. He remained in Germany for another four years, his professional opportunities compromised by the Nazi party, which viewed German architects' international perspective on architecture as an affront to national loyalties. An offer to become director of the School of Architecture came from Chicago's Armour Institute of Technology in 1936, along with a competing offer for the professorship of design from Harvard University. Mies ultimately accepted Armour's offer, on the condition that he have complete control over the curriculum. Mies arrived in Chicago in 1938, where he would stay until his death over 30 years later.

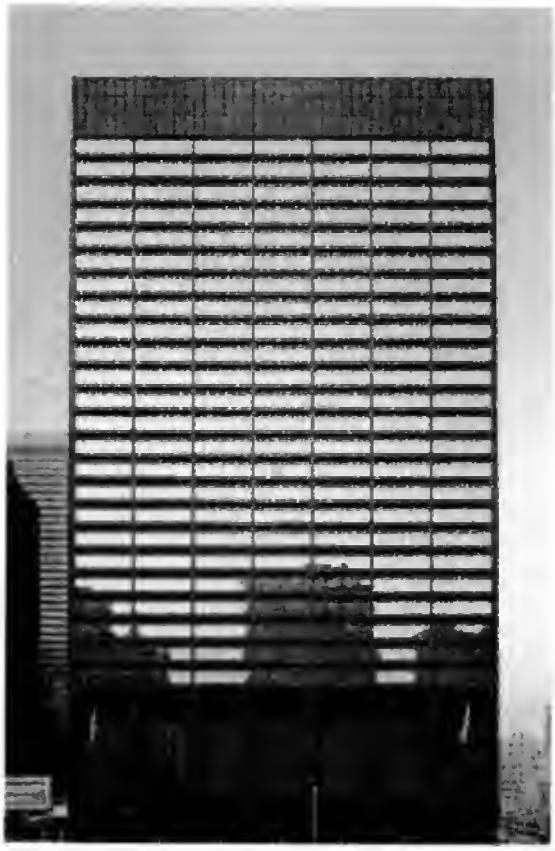
Although Mies was a well-known figure in the European world of art and architecture when he immigrated to the United States from Germany, it was in Chicago that he would solidify his reputation as one of the iconic figures of the Modern Movement. The position at the Armour Institute (which merged with the Lewis Institute to become the Illinois Institute of Technology in 1940) offered Mies an opportunity not only to clarify and disseminate his ideas about architecture, but also to put them into concrete practice on its new campus. In the 1940s, Mies developed a comprehensive plan for the entire campus consisting of modules along the existing street grid. The buildings Mies designed for the school, with their skeletal steel frames, expanses of glass, and unadorned brickwork, meshed perfectly with this modular layout of the campus site. Among the best of these building is Crown Hall, which housed the school's architecture department and was designated a Chicago Landmark in 1997. Mies stayed on as director of IIT until his retirement in 1958.

With the help of local developer Herbert Greenwald and other important patrons, Mies began to build up the reputation of his architecture firm in the years following World War II. The roughly two decades following the war were the most important of Mies's career, with many of his ideas on structure and space in architecture coming to full fruition. It was during this period

that Mies produced some of his most groundbreaking structures, including the 860-880 Lake Shore Drive Apartments (1949-1951) designated a Chicago Landmark in 1996; the Seagram Building in New York City (1958); and the Farnsworth House in Plano, Illinois (1951). Although he received commissions from around the world, Mies also designed an impressive number of buildings in and around Chicago, including over twenty buildings for the IIT campus, fourteen apartment buildings, the three buildings comprising the Federal Center, and two corporate office towers, one of which was the IBM Building.

The 1960s, Mies's final decade, was his most prolific. His office was flooded with commissions for buildings from corporate and financial institutions, city governments, universities, and residential developers. Although Mies, who was entering his 80s in these later years left much of the execution of these commissions to his staff, he remained vitally involved in major design decisions as the principal of the firm.

Mies would not live to see the completion of the IBM Building. The final drawings for the building were finished at the end of July, 1969—Mies died just a few short weeks later, on August 19. At the ceremony dedicating the building on September 21, 1972, a bust of Mies by sculptor Marino Marini was unveiled. The bust remains on display in the lobby of the building today. At the time of the building's completion, two years after Mies's death, architects were still grappling with his staggering legacy. His followers continued to create buildings in the Miesian image. Other architects railed against what they considered to be his dogmatic approach to architecture, and the force of this rebellion only re-affirmed his influence. The IBM Building, one of his last projects, remains as a forceful reminder of Mies van der Rohe's uncompromising architectural vision.



The 1960s saw Chicago's skyline sprout Miesian-inspired skyscrapers designed by prominent architects. (Right): From 1962-1965, the Equitable Building, by Skidmore, Owings, and Merrill, rose on a prominent site along the Chicago river, displaying a continuous weld steel structure clad in gray-green aluminum. (Top left): The 1965 Richard J. Daley Center by Jacques Brownson of C. F. Murphy and Associates, although a government building, resembles a Mies corporate tower with its modular structure in Cor-Ten steel. (Above right): The Time-Life Building by Harry Weese from 1966 also employs Cor-Ten steel but with bronze mirrored glass surfaces that distinguish it from more orthodox Miesian skyscrapers.

CRITERIA FOR DESIGNATION

According to the Chicago Municipal Code (Sect. 2-120-620 and -630), the Commission on Chicago Landmarks has the authority to recommend a building or district for landmark status if it determines that it meets two or more of the stated "criteria for landmark designation," as well as possesses a significant degree amount of "integrity."

Based on the findings in this report, the following should be considered by the Commission on Chicago Landmarks whether to recommend that the IBM Building be designated as a Chicago Landmark.

Criterion 1: Critical Part of the City's Heritage

Its value as an example of the architectural, cultural, economic, historic, social, or other aspect of the heritage of the City of Chicago, State of Illinois, or the United States.

- From its opening in 1972 to 2006, the IBM Building housed the Chicago offices for the International Business Machines Corporation (IBM), one of the world's largest computer companies. At the time of the building's construction in the late 1960s, the IBM Corporation was already a business behemoth, having grown from a small manufacturer of tabulating machines into a vanguard of computer technology, with offices, plants, and research divisions scattered all over the world.

- The design of the IBM Building by Mies van der Rohe, with its slab-like massing, fine but subtle detailing, and clearly defined structure, aptly represented not only the pared down elegance indicative of twentieth century modernism, but also the inventiveness and the technical drive of the IBM Corporation. The building was commissioned during a period of corporate ascendancy in Chicago and other major cities, with countless businesses constructing office buildings to reflect their power and influence.

Criterion 4: Important Architecture

Its exemplification of an architectural type or style distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

- The IBM Building embodies the philosophy of architecture developed by Mies over the span of his decades-long career. In particular, the building is a mature and archetypal example of the Miesian skyscraper. The IBM Building exhibits all of the hallmark features of Mies's prototype with its prismatic massing, steel structure, sleek curtain wall with I-beams welded to external mullions, glass-encased lobby, and gracious plaza that flows seamlessly from within.

- At the time of its construction, the IBM Building featured several innovations, both in the construction of the curtain wall and in the mechanical systems, geared toward greater control of temperature and humidity. These innovations were specifically designed to accommodate the computers that were to be used inside the building.

Criterion 5: Important Architect

Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Chicago, the State of Illinois, or the United States.

- The IBM Building was the final tall office building designed by internationally renowned architect Ludwig Mies van der Rohe (1886-1969). Known for his understanding of and appreciation of structure and materials, Mies created a new twentieth century architecture and helped to reshape the skylines of Chicago and most other major cities. By the time that the IBM Corporation approached the offices of Mies van der Rohe to design an office building for them in downtown Chicago, Mies was considered to be one of the greatest architects of the 20th century.

- Already known as the former director of the Bauhaus before he immigrated to Chicago in 1938, Mies became one of the most influential architects in the world, designing such modern masterpieces as the 860-880 Lake Shore Drive Apartments in Chicago and the Seagram Building in New York. The influence of Mies's designs for tall buildings like the IBM Building is readily evident in the numbers of imitators that can be seen in downtown Chicago and other urban areas, and his impact on architectural design worldwide.

Integrity Criteria

The integrity of the proposed landmark must be preserved in light of its location, design, setting, materials, workmanship, and ability to express its historic community, architecture or aesthetic value.

The IBM Building remains as an outstanding example of Mies van der Rohe's glass and steel high-rise architecture, with exceptional integrity, retaining most of its exterior features as well as historic features within the main lobby. The aluminum curtain wall remains intact, as do the glass walls enclosing the lobby, and aluminum-clad structural columns and canopy at the building's base. All original materials within the lobby have been also been retained.

The configuration and materials in the upper office floors, with the exception of the elevator call lights and some original features along the core walls, have been altered over the years to suit tenant needs.

SIGNIFICANT HISTORICAL AND ARCHITECTURAL FEATURES

Whenever a building or district is under consideration for landmark designation, the Landmarks Commission is required to identify the "significant features" of the property. This is done to enable both the owners and the public to understand which elements are considered most important to preserve in order to protect the historical and architectural character of the proposed landmark.

Based on its evaluation of the IBM Building, the Commission staff recommends the significant features for preservation of this building be:

- All exteriors, including rooflines of the building;

- Surrounding plazas associated with the building and the podium upon which the building sits, all in their entirety; and
- first-floor lobby interior.

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From IBM Corporate files, p 5, p 9 (upper and lower left), p 12 (lower right)
From Hasan-Uddin Khan, *International Style: Modernist Architecture from 1925 to 1965.* p 15 (lower)
From Pauline Saliga, *The Sky's the Limit.* p12 (upper left), p 18 (lower right)
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From John Zukowsky and Martha Thorne, *Masterpieces of Chicago Architecture.* p 18 (upper left), p 18 (upper right)

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